DOCUMENT RESUME

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IDENTIFIERS	Preapprenticeship Programs

ABSTRACT

This self-paced student training module on introduction to the auto mechanics trade is part of the course, Auto Mechanics, which was developed for Preapprenticeship Phase 1 Training. (A companion instructor's guide is available separately as CE 032 866.) The course is designed to provide students with an orientation to the trade and an opportunity to explore it. The purpose of the module is to provide an introduction to the automobile mechanic trade, including history, trends, working conditions, hiring practices, training, employment opportunities, and wage scale of the Automobile Mechanics Trade. The module may contain some or all of the following: a cover sheet listing module title, goal, and performance indicator; study guide/checklist with directions for module completion; introduction; information sheets providing information and graphics covering the module topic(s); supplementary references; self-assessment; self-assessment answers; post assessment; and post-assessment answers. (YLB)

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INDIVIDUALIZED LEARNING SYSTEMS

PRE-APPRENTICESHIP
PHASE 1 TRAINING

INTRODUCTION TO THE AUTOMOBILE MECHANIC TRADE

CE032867

Goal:

The student will be able to identify and briefly describe the history, trends, working conditions, hiring practices, training, employment opportunities and wage scale of the Automobile Mechanics Trade.

Performance Indicators:

The student will demonstrate knowledge of the material by successfully completing a Self Assessment and a Post Assessment exam.

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Information

HISTORY

Around the turn of the century the automobile was an interesting but impractical novelty. Motorcar travel in those days was often uncomfortable, with motorists having to stop for a puncture or blowout every seven or eight miles. When breakdowns occurred, and they were frequent, the pioneer motorists had to make their own repairs with their own tools and initiative.

TRENDS

During the last fifty years or so, the United States has seen the greatest growth in automobile ownership that the world has ever known. The average American family adds 10,000 miles annually to its auto odometer. The total annual mileage for all vehicles, private and commercial, is approximately 767 billion. Privately owned vehicles account ofr an estimated 82% of that total. The average owner spends about $150.00 each year to maintain his or her car, which does not include tire purchases, etc. The annual revenue generated from auto technicians, repair shops and dealer maintenance shops is over $15 billion. There is a serious shortage of service technicians. The motor vehicle has become increasingly complex and requies a highly-trained mechanic to service it.

WORKING CONDITIONS

Most mechanics work indoors where it is well ventilated, lighted and heated. Some older shops do not offer such a pleasant working environment. Mechanics often work with dirty and greasy parts. They often work in awkward positions, as well as having to lift heavy parts and tools. Minor injuries occur, but serious accidents can be avoided by observing the safety practices of the trade.

HIRING PRACTICES

Employers look for people with mechanical aptitude, manual dexterity, and a knowledge

of automobiles. A driver's license is required, and showing an interest in the work by working on cars as a hobby would be looked upon favorably. An ability to learn should be demonstrated by reading and studying new developments in the field. Employers prefer high school graduates who attended courses in automobile repair, physical science and mathematics. Reasonably good health and average strength are essential to accomplish the required tasks. The auto mechanic has to be patient and thorough when trying to identify the problem and find the appropriate solution. Customers appreciate honest and reliable technicians.

Hundreds of dollars are invested in hand tools by the experienced mechanic. Beginning mechanics purchase some basic tools and acquire more as they advance. Employers furnish power tools, engine analyzers and other testing equipment.

Mechanics generally begin their training as general service technicians, eventually specializing and becoming automatic transmission specialists, tune-up mechanics, front-end mechanics, etc. Specialists are often in great demand and can command larger salaries. Specialization provides greater efficiency and better service as well as providing numerous outlets for individual interests and abilities.

TRAINING

Automobile mechanics generally learn their trade on the job. A trainee can make simple repairs after a few months. Usually it takes three or four years to become accomplished in all types of repairs, and an additional year or two to learn a specialty.

Formal apprenticeships are three- or four-year programs. The training includes both on-the-job training and classroom training. The on-the-job training includes basic service and special procedures. Classroom instruction is in related theory such as mathematics, safety and customer relations.

EMPLOYMENT OPPORTUNITIES

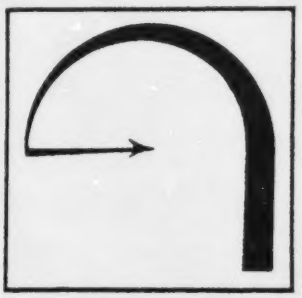
An automobile mechanic can find employment in any section of the country. More than 860,000 persons worked as automobile mechancis in 1978. Job opportunities should be plentiful in the years ahead. More mechanics will be needed as the number of vehicles on the road increases, and to service special equipment such as pollution control devices, safety features, etc.

Auto mechanics are employed by dealerships, repair shops, gas stations, department stores with automobile service, governmental agencies, leasing companies, etc. An independent shop may hire from one to five mechanics, in contrast to an auto dealership that employs 100 mechanics.

WAGE SCALE

According to a survey of 36 cities taken in 1978, skilled automobile mechanics earned an average of $9.32 an hour. Differences exist according to the geographical area and method of payment. Wages can be calculated by an hourly rate, according to a percentage of the labor costs charged to the customer, or a combination of salary plus part of the labor charges. Employers often guarantee a minimum weekly wage for commissioned mechanics. The skill of the mechanic can double or triple wages.

Most mechanics work from 40 to 48 hours per week. Mechanics receive overtime pay for any time they spend over 40 hours. Some mechanics belong to labor unions.



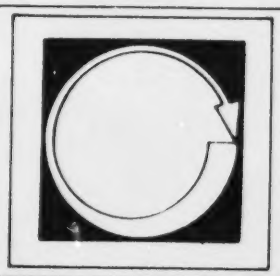
Supplementary References

1. James J. Bradley & Dawson Taylor, Aim for a Job in Automotive Service, Richard Rosen Press, 1968.

2. William Harrison, Find a Career in Auto Mechanics, G. P. Putnom's Sons, 1964.

3. Occupational Outlook Handbook, 1980-81 Edition, United States Department of Labor, Bureau of Labor Statistics, March, 1980.

Self Assessment



In the blanks provided, write a T if the statement is true and an F if the statement is false.

1. ____ In the early days motorists felt comfortable and secure when they rode in a motor car.

2. ____ Mechanics were available to help the first motorists repair their cars.

3. ____ The average owner is estimated to spend $150 each year to maintain his or her car.

4. ____ There is a serious shortage of service technicians.

5. ____ The motor vehicle has become increasingly complex and requires a highly trained mechanic to service it.

6. ____ All automotive shops are clean and pleasant places to work.

7. ____ A driver's license is a requirement for a mechanic.

8. ____ Employers prefer high school graduates as automobile mechanics.

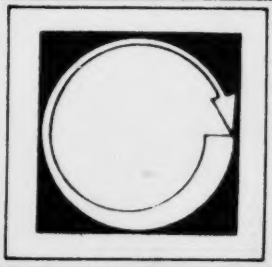
9. ____ Mechanics begin training as general service technicians.

10. ____ An automobile mechanic and find employment in any section of the country.

Self Assessment Answers

1. F
2. F
3. T
4. T
5. T
6. F
7. T
8. T
9. T
10. T

Post Assessment



Complete each statement by writing the appropriate word or phrase in the blank provided.

1. During the last _____ years the _____ _____ has shown the greatest growth in automobile ownership in the world.

2. The average American family drives _____ miles annually.

3. Employers look for people with _____ aptitude, _____ dexterity and a _____ of automotibles.

4. Customers appreciate _____ and _____ technicians.

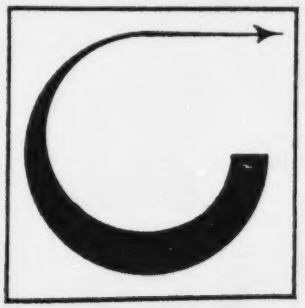
5. The experienced mechanic will have _____ of dollars invested in hand tools.

6. Automobile _____ generally learn their trade on the job.

7. Automobile mechanics are _____ in many areas.

8. An automobile dealership may _____ hundreds of mechanics.

Instructor Post Assessment Answers



1. 50, United States
2. 10,000 miles
3. mechanical, manual, knowledge
4. honest, reliable
5. hundreds
6. mechanics
7. employed
8. employ